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Erratum

Erratum to "Triangular array limits for continuous time random walks" [Stochastic Process. Appl. 118 (9) (2008) 1606–1633]

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The CTRW limit process should be $M(t) = A(E(t)-)$ throughout the paper [2], not $A(E(t))$. Unless $A(t)$ and $D(t)$ are independent, this is a different process. To clarify the argument in Lemma 3.7, note that (here $q_h(s,t) = P\{A(s) \in S | s < E(t) \le s+h\}$)

$$\lim_{h\downarrow 0} q_h(s,t) = P\{A(s-) \in S | E(t) = s\} \quad \text{for } \lambda^1\text{-almost every } s \ge 0$$

since $s < E(t)$ in the conditioning event, and hence in (3.33) one should write (here $f(s,t)$ is the density of $E(t)$)

$$\begin{aligned} \frac{1}{h} P\{A(s) \in S, s < E(t) \le s+h\} &= q_h(s,t) \frac{1}{h} P\{s < E(t) \le s+h\} \\ &\to P\{A(s-) \in S | E(t) = s\} f(s,t) \end{aligned} \tag{1}$$

and not $P\{A(s) \in S | E(t) = s\} f(s,t)$ as stated in the paper. For example, consider the case $A(t) = D(t)$, a stable subordinator, and $E(t) = \inf\{x > 0 : A(x) > t\}$, its inverse or first-passage-time process. Then $A(E(t)-) < t$ and $A(E(t)) > t$ almost surely for any $t > 0$, by Bertoin [1, III, Theorem 4], and it is clear from (3.24) that $M(t) < t$ almost surely.

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